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09/842,531	04/25/2001	Hyon T. Kim	5181-83600	7257

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EXAMINER	
NGUYEN, HAI V	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/842,531	KIM, HYON T.	
	Examiner	Art Unit	
	Hai V. Nguyen	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *03* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 July 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-90* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-90* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the communication received on 19 July 2006.

2. Claims 1-90 are presented for examination.

3. The pending related application #: 09/842,495, 09/842,596.

4. The related patent #: 6,920,491 B2 and #: 6,965,951 B2.

Response to Arguments

5. Applicant's arguments and amendments filed on 19 July 2006 have been fully considered but they are not to be persuasive. Applicant's arguments are deemed moot in view of the following new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment to the independent claims 1, 31, and 61 which significantly affected the scope thereof.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-90 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Boggs** et al. US patent # **6,081,812** in view of **Stoevhase** U.S. patent # **5,805,924.**

8. As to claim 1, Boggs discloses a method for handling fabric state changes *(state change, col. 19, lines 59-65)*, comprising:

a host system *(Fig. 2, compute node 200)* receiving from a fabric *(Fig. 2, fabric 106)* coupled to the host system an event *(a broadcast message)* indicating a fabric state

change for one or more host adapter ports of said host system *(a computer node may interrogate an ION 212 for any state changes of its working set of VSI 602 conveyed to the interconnect fabric 106, (col. 19, line 53 – col. 20, line 18; col. 20, line 66 – col. 21, line 63))*; and

the host system dynamically changing the host system's fabric device configuration in response to said receiving an event *(the computer node 200 can get an up to date view of the name space, (col. 19, line 53 – col. 20, line 18; col. 20, line 66 – col. 21, line 63))*.

However, Boggs does not explicitly disclose the host system bringing online or taking offline one or more fabric devices for the one or more host adapter ports for the host system.

Stoevhase discloses the system manager bringing online or taking offline one or more fabric devices for the one or more host adapter ports for the system *(col. 6 line 60 – col. 7, line 6; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention made to have incorporated Stoevhase's teachings of the system manager brings online or offline devices by altering the service parameters of the fabric element port *(Stoevhase, col. 6 line 60 – col. 7, line 6)* with the teachings of Boggs, for the purpose of *providing the up-to-date view of the IONs 212 (Boggs, col. 21, lines 50-56). Stoevhase also suggests that the system manager desires to update the service parameters of the fabric element port associated with the device (Stoevhase, col. 6 line 60 – col. 7, line 6).*

9. As to claim 2, Boggs-Stoevhase discloses, determining an event type for said event *(Boggs, state change or working set VIS changes) (Stoevhase, name change, service changes, inactive or removed or port addresses changes; col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

10. As to claim 3, Boggs-Stoevhase discloses, wherein if the event type indicates that one of the fabric host adapter ports has lost connectivity to the fabric, said dynamically changing comprises taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

11. As to claim 4, Boggs-Stoevhase discloses, wherein said taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric comprises: reading a persistent repository that indicates which fabric devices are currently online for the host adapter port that lost connectivity to the fabric; and taking offline the fabric devices indicated by the persistent repository for the host adapter port that lost connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

12. As to claim 5, Boggs-Stoevhase discloses, wherein said taking offline comprises disabling an operating system node for each of the one or more fabric devices being taken offline, wherein each operating system node provides a communication

mechanism to a corresponding fabric device *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

13. As to claim 6, Boggs-Stoevhase discloses, wherein if the event type indicates that one of the fabric host adapter ports has lost connectivity to the fabric, said dynamically changing comprises:

accessing a configuration file for the host adapter port that lost connectivity to the fabric to determine if fabric devices for that host adapter port are to be unconfigured if that host adapter port loses connectivity to the fabric; and if the configuration file indicates that fabric devices are to be unconfigured upon lose of connectivity to the fabric, taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

14. Claim 7 has similar limitations of claim 4; therefore, it is rejected under the same rationale as in claim 4.

15. Claim 8 has similar limitations of claim 5; therefore, it is rejected under the same rationale as in claim 5.

16. As to claim 9, Boggs-Stoevhase discloses, prior to said receiving an event: a host adapter driver for one of the one or more host adapter ports becoming inactive or detached; and generating the event indicating that one of the one or more host adapter ports has lost connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 –*

col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

17. As to claim 10, Boggs-Stoevhase discloses, wherein said accessing a configuration file for the host adapter port that lost connectivity to the fabric comprises reading a user defined attribute in the configuration file, wherein the user-define attribute indicates whether or not fabric devices for that host adapter port are to be unconfigured if that host adapter port loses connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

18. As to claim 11, Boggs-Stoevhase discloses, wherein if the event type indicates that one of the fabric host adapter ports has acquired connectivity to the fabric, said dynamically changing comprises bringing online one or more fabric devices for the host adapter port that has acquired connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

19. As to claim 12, Boggs-Stoevhase discloses, wherein said bringing online one or more fabric devices for the host adapter port that has acquired connectivity to the fabric comprises: reading a persistent repository that indicates which fabric devices were previously online for the host adapter port that has acquired connectivity to the fabric; and bringing online the fabric devices indicated by the persistent repository for the host adapter port that has acquired connectivity to the fabric *(Stoevhase, col. 2, lines 13-60;*

col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

20. As to claim 13, Boggs-Stoevhase discloses, wherein said bringing online comprises creating an operating system node for each of the one or more fabric devices being to brought online, wherein each operating system node provides a communication mechanism to a corresponding fabric device *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

21. As to claim 14, Boggs-Stoevhase discloses, wherein if the event type indicates that one of the fabric host adapter ports has acquired connectivity to the fabric, said dynamically changing comprises: accessing a configuration file for the host adapter port that has acquired connectivity to the fabric to determine if fabric devices for that host adapter port are to be configured if that host adapter port acquires connectivity to the fabric; and if the configuration file indicates that fabric devices are to be configured upon that host adapter port's connectivity to the fabric, bringing online one or more fabric devices for that host adapter port that has acquired connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

22. Claim 15 has similar limitations of claim 12; therefore, it is rejected under the same rationale as in claim 12.

23. Claim 16 has similar limitations of claim 13; therefore, it is rejected under the same rationale as in claim 13.

24. As to claim 17, Boggs-Stoevhase discloses, prior to said receiving an event: a host adapter driver for one of the one or more host adapter ports becoming active or attached; and generating the event indicating that one of the one or more host adapter ports has acquired connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

25. As to claim 18, Boggs-Stoevhase discloses, wherein said accessing a configuration file for the host adapter port that has acquired connectivity to the fabric comprises reading a user-defined attribute in the configuration file, wherein the user-define attribute indicates whether or not fabric devices for that host adapter port are to be configured if that host adapter port acquires connectivity to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

26. As to claim 19, Boggs-Stoevhase discloses, wherein if the event type indicates that a new fabric device has been connected to the fabric, said dynamically changing comprises bringing online the new fabric device for one of the one or more host adapter ports *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

27. As to claim 20, Boggs-Stoevhase discloses, wherein said bringing online comprises creating an operating system node for the new fabric device being brought online, wherein the operating system node provides a communication mechanism to the new fabric device *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

28. As to claim 21, Boggs-Stoevhase discloses, wherein said bringing online the new fabric device comprises updating a persistent repository to indicate that the new fabric device is online for the host adapter port *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

29. As to claim 22, Boggs-Stoevhase discloses, wherein if the event type indicates that a new fabric device has been connected to the fabric, said dynamically changing comprises: accessing a configuration file for one of the one or more host adapter ports to determine if newly connected fabric devices for that host adapter port are to be dynamically configured; and if the configuration file indicates newly connected fabric devices are to be dynamically configured, bringing online the new fabric device for that host adapter port *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

30. Claim 23 has similar limitations of claim 20; therefore, it is rejected under the same rationale as in claim 20.

31. Claim 24 has similar limitations of claim 21; therefore, it is rejected under the same rationale as in claim 21.

32. As to claim 25, Boggs-Stoevhase discloses, prior to said receiving an event: connecting the fabric device to the fabric *(Stoevhase, (col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*; and a fabric driver generating the event indicating that the new fabric device has been connected to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

33. As to claim 26, Boggs-Stoevhase discloses, wherein said accessing a configuration file comprises reading a user-defined attribute in the configuration file, wherein the user define attribute indicates whether or not newly connected fabric devices for that host adapter port are to be dynamically configured upon detection *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

34. As to claim 27, Boggs-Stoevhase discloses, wherein the one or more host adapter ports comprise Fibre Channel host adapter ports *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

35. As to claim 28, Boggs-Stoevhase discloses, wherein the fabric comprises a Fibre Channel switched fabric comprising a plurality of Fibre Channel switches *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

36. As to claim 29, Boggs-Stoevhase discloses, wherein the fabric is part of a storage area network (SAN), and wherein the fabric devices comprise storage devices *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

37. As to claim 30, Boggs-Stoevhase discloses, wherein said dynamically changing comprises verifying the one or more, fabric devices before bringing the one or more fabric devices online, wherein said verifying comprises accessing a fabric name server to determine if the one or more fabric devices are currently connected to the fabric *(Stoevhase, col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

38. Claim 31 is corresponding system claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

39. Claims 32-60 are similar limitations of claims 2-30; therefore, they are rejected under the same rationale as in claims 2-30.

40. Claim 61 is corresponding computer readable medium claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

41. Claims 62-90 are similar limitations of claims 2-30; therefore, they are rejected under the same rationale as in claims 2-30.

Claim Rejections - 35 USC § 102

42. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

43. Claims 1-90 are rejected under 35 U.S.C. 102(b) as being anticipated by **Stoevhase** U.S. patent # **5,805,924**.

44. As to claim 1, Stoevhase, Method And Apparatus For Configuring Fabrics Within A Fibre Channel System, substantially teaches the invention as claimed, including a method for handling fabric state changes *(fabric element's name or service changes)*, comprising:

a host system *(the system manager)* receiving from a fabric couple to the host system an event indicating a fabric state change *(DSP requests)* for one or more host adapter ports of said host system *(col. 6, line 60 - col. 7, line 6; col. 7, line 44 – col. 8, line 67)*; and

the host system dynamically changing the host system's fabric device configuration in response to said receiving an event *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30;*

col. 7, line 44 – col. 8, line 67), wherein said host system dynamically changing comprises the host system bringing online or taking offline one or more fabric devices for the one or more host adapter ports for the host system *(col. 2, lines 13-60; col. 6 line 60 – col. 7, line 6; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

45. As to claim 2, Stoevhase teaches, determining an event type for said event *(name change, service changes, inactive or removed or port addresses changes; col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

46. As to claim 3, Stoevhase teaches, wherein if the event type indicates that one of the fabric host adapter ports has lost connectivity to the fabric, said dynamically changing comprises taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

47. As to claim 4, Stoevhase teaches, wherein said taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric comprises: reading a persistent repository that indicates which fabric devices are currently online for the host adapter port that lost connectivity to the fabric; and taking offline the fabric devices indicated by the persistent repository for the host adapter port that lost connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col.*

7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

48. As to claim 5, Stoevhase teaches, wherein said taking offline comprises disabling an operating system node for each of the one or more fabric devices being taken offline, wherein each operating system node provides a communication mechanism to a corresponding fabric device *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

49. As to claim 6, Stoevhase teaches, wherein if the event type indicates that one of the fabric host adapter ports has lost connectivity to the fabric, said dynamically changing comprises:

accessing a configuration file for the host adapter port that lost connectivity to the fabric to determine if fabric devices for that host adapter port are to be unconfigured if that host adapter port loses connectivity to the fabric; and if the configuration file indicates that fabric devices are to be unconfigured upon lose of connectivity to the fabric, taking offline one or more fabric devices configured through the host adapter port that lost connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

50. Claim 7 has similar limitations of claim 4; therefore, it is rejected under the same rationale as in claim 4.

51. Claim 8 has similar limitations of claim 5; therefore, it is rejected under the same rationale as in claim 5.

52. As to claim 9, Stoevhase teaches, prior to said receiving an event: a host adapter driver for one of the one or more host adapter ports becoming inactive or detached; and generating the event indicating that one of the one or more host adapter ports has lost connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

53. As to claim 10, Stoevhase teaches, wherein said accessing a configuration file for the host adapter port that lost connectivity to the fabric comprises reading a user defined attribute in the configuration file, wherein the user-define attribute indicates whether or not fabric devices for that host adapter port are to be unconfigured if that host adapter port loses connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

54. As to claim 11, Stoevhase teaches, wherein if the event type indicates that one of the fabric host adapter ports has acquired connectivity to the fabric, said dynamically changing comprises bringing online one or more fabric devices for the host adapter port that has acquired connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*.

55. As to claim 12, Stoevhase teaches, wherein said bringing online one or more fabric devices for the host adapter port that has acquired connectivity to the fabric comprises: reading a persistent repository that indicates which fabric devices were previously online for the host adapter port that has acquired connectivity to the fabric; and bringing online the fabric devices indicated by the persistent repository for the host adapter port that has acquired connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

56. As to claim 13, Stoevhase teaches, wherein said bringing online comprises creating an operating system node for each of the one or more fabric devices being to brought online, wherein each operating system node provides a communication mechanism to a corresponding fabric device *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

57. As to claim 14, Stoevhase teaches, wherein if the event type indicates that one of the fabric host adapter ports has acquired connectivity to the fabric, said dynamically changing comprises: accessing a configuration file for the host adapter port that has acquired connectivity to the fabric to determine if fabric devices for that host adapter port are to be configured if that host adapter port acquires connectivity to the fabric; and if the configuration file indicates that fabric devices are to be configured upon that host adapter port's connectivity to the fabric, bringing online one or more fabric devices for that host adapter port that has acquired connectivity to the fabric *(col. 2, lines 13-60;*

col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

58. Claim 15 has similar limitations of claim 12; therefore, it is rejected under the same rationale as in claim 12.

59. Claim 16 has similar limitations of claim 13; therefore, it is rejected under the same rationale as in claim 13.

60. As to claim 17, Stoevhase teaches, prior to said receiving an event: a host adapter driver for one of the one or more host adapter ports becoming active or attached; and generating the event indicating that one of the one or more host adapter ports has acquired connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

61. As to claim 18, Stoevhase teaches, wherein said accessing a configuration file for the host adapter port that has acquired connectivity to the fabric comprises reading a user-defined attribute in the configuration file, wherein the user-define attribute indicates whether or not fabric devices for that host adapter port are to be configured if that host adapter port acquires connectivity to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

62. As to claim 19, Stoevhase teaches, wherein if the event type indicates that a new fabric device has been connected to the fabric, said dynamically changing comprises bringing online the new fabric device for one of the one or more host adapter ports *(col.*

2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

63. As to claim 20, Stoevhase teaches, wherein said bringing online comprises creating an operating system node for the new fabric device being brought online, wherein the operating system node provides a communication mechanism to the new fabric device *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

64. As to claim 21, Stoevhase teaches, wherein said bringing online the new fabric device comprises updating a persistent repository to indicate that the new fabric device is online for the host adapter port *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

65. As to claim 22, Stoevhase teaches, wherein if the event type indicates that a new fabric device has been connected to the fabric, said dynamically changing comprises: accessing a configuration file for one of the one or more host adapter ports to determine if newly connected fabric devices for that host adapter port are to be dynamically configured; and if the configuration file indicates newly connected fabric devices are to be dynamically configured, bringing online the new fabric device for that host adapter port *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col.*

18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

66. Claim 23 has similar limitations of claim 20; therefore, it is rejected under the same rationale as in claim 20.

67. Claim 24 has similar limitations of claim 21; therefore, it is rejected under the same rationale as in claim 21.

68. As to claim 25, Stoevhase teaches, prior to said receiving an event: connecting the fabric device to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25)*; and a fabric driver generating the event indicating that the new fabric device has been connected to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

69. As to claim 26, Stoevhase teaches, wherein said accessing a configuration file comprises reading a user-defined attribute in the configuration file, wherein the user define attribute indicates whether or not newly connected fabric devices for that host adapter port are to be dynamically configured upon detection *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

70. As to claim 27, Stoevhase teaches, wherein the one or more host adapter ports comprise Fibre Channel host adapter ports *(col. 2, lines 13-60; col. 6 line 44 – col. 7,*

line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).

71. As to claim 28, Stoevhase teaches, wherein the fabric comprises a Fibre Channel switched fabric comprising a plurality of Fibre Channel switches *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

72. As to claim 29, Stoevhase teaches, wherein the fabric is part of a storage area network (SAN), and wherein the fabric devices comprise storage devices *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

73. As to claim 30, Stoevhase teaches, wherein said dynamically changing comprises verifying the one or more, fabric devices before bringing the one or more fabric devices online, wherein said verifying comprises accessing a fabric name server to determine if the one or more fabric devices are currently connected to the fabric *(col. 2, lines 13-60; col. 6 line 44 – col. 7, line 30; col. 7, line 44 – col. 8, line 67; col. 18, line 12 – col. 19, line 47; col. 21, line 40 - col. 24, line 33; col. 25, lines 44-65; col. 27, lines 11-25).*

74. Claim 31 is corresponding system claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

75. Claims 32-60 are similar limitations of claims 2-30; therefore, they are rejected under the same rationale as in claims 2-30.

76. Claim 61 is corresponding computer readable medium claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

77. Claims 62-90 are similar limitations of claims 2-30; therefore, they are rejected under the same rationale as in claims 2-30.

78. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

Response to Arguments

79. Applicant's arguments filed on 19 July 2006 have been fully considered but they are not persuasive.

80. In the remark, Applicant argued in substance that:

Point (A), the prior art do not disclose that, *"a DSP request is received by a host system coupled to a fabric"* in claim 1.

As to point (A), Stoevhase discloses that, *"the host waits for another DSP request from a fabric element" (Fig. 11, step 110-111).*

Point (B), the prior art does not disclose that, *"the activity is not changing the host system's fabric device configuration".*

Point (B), Stoevhase discloses that, *"If a device connected to a fabric element port becomes inactive or is removed from the system, the system manager has the option of altering the service parameters of the fabric element port. If a device is being moved temporarily, the system manager may choose to leave the service parameters of its associated fabric element port unchanged, so that it will not be necessary to invoke the DSP procedure, which could potentially alter the system's service parameters and require taking at least some of the system devices off-line for reinitialization. However, if for any reason the system manager determines that it is desirable to update the service parameters of the fabric element port associated with the device, he may do so, triggering operation of the DSP procedure." (col. 6, line 60 - col. 7, line 6).*

Conclusion

81. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 571-272-3901. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hai V. Nguyen
Examiner
Art Unit 2142

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